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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,588	05/11/2007	Stefan Prebeck	ZAHFRI P886US	8495
20210 7590 12/22/2010 DAVIS & BUJOLD, P.L.L.C. 112 PLEASANT STREET CONCORD, NH 03301				
EXAMINER				
PIPALA, EDWARD J				
ART UNIT		PAPER NUMBER		
3663				
MAIL DATE		DELIVERY MODE		
12/22/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,588

Applicant(s)

PREBECK ET AL.

Examiner

EDWARD PIPALA

Art Unit

3663

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTC-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office action is in response to Applicant's amendments and remarks of 10/4/10.
Claims 1-5 have been canceled.
Claims 6-20 are presently pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Hrazdera (US 6,942,595), in view of Applicant's admitted prior art in the background of the invention..

Applicant's exemplary claim 6 presently recites:

a method of operating a drive motor driving both a tractor and a trailer via a traveling power takeoff shaft, the traveling power takeoff shaft having at least three discrete, shiftable power takeoff stages and the traveling power takeoff shaft being connected to the drive motor, wherein one of a wheel speed and a vehicle speed is determined and the traveling power takeoff shaft is electronically matched, via a motor speed of rotation, to a ratio of at least one of the determined vehicle speed and the determined wheel speed, the method comprising the steps of:

shifting a power takeoff stage to one of a corresponding next higher and the next lower discrete shiftable power takeoff stage, upon attainment of one of a higher and a lower threshold value of the drive motor speed of rotation, so as to maintain an optimal drive for both the tractor and the trailer so that both the tractor and the trailer travel together substantially as an integrated unit.

Hrazdera teaches a control system for the drive of a power take-off mechanism on an agricultural tractor that records machine-specific values of the implement attached to the tractor, where the drive train between the tractor engine and the power take-off includes a CVT transmission, and column 4, lines 33-37 which further teach that it is possible to run the PTO with the CVT as a ground speed PTO in which its speed is directly aligned with the traveling speed of the agricultural vehicle, and that a conventional transmission may be used in place of the CVT (*which would then provide Applicant's recited speed stages and shifting from a higher to a lower, and vice versa*).

Hrazdera also teaches that the control device is connected with a processor via a signal lead for receiving its output signals, and that the control device is connected for the formation of output signals via input leads, controls, sensors, and actuators for the tractor to read the machine specific parameters of the attached implement, for adjusting any of the motor speed, clutch slip and/or power takeoff stage (gear ratio of the transmission).

While the Examiner admits that Hrazdera is primarily directed to the use of a CVT transmission, conversely Applicant has already admitted in the background of the invention that it is know to one of ordinary skill in the art to make use of a power takeoff drive with a trucking vehicle so essentially the optimal drive is maintained for both the tractor and the

trailer so that both travel together as a substantially integrated unit.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have implement the teachings of Hrazdera with respect to detection of operating parameters and control of a power takeoff speed ratio and/or stage with respect to traveling speed of a vehicle, particularly since Applicant's background of the invention acknowledges that it is known in the art that the speed of the take-off may need to be adjusted with respect to the speed of the motor speed and traveling speed of the vehicle so as to drive a trailing farm implement at an appropriate speed ratio to that of the vehicle.

Applicant's dependent claims 7-9 further recite compensating for starting from a stop (zero speed) through the use of clutch slippage, through either electronic or manual control, whereas Hrazdera already teaches the use of an electronic control system for a power take-off which includes a CVT transmission, and where it is notoriously old in the art to manually perform clutch slippage when engaging a motor of a vehicle from a stop.

Applicant's independent claims 10 and 14 essentially recite a method similar to that of previous independent claim 6, with the additional recitations of "electronically matching" and "electronically shifting", respectively, whereas as noted above it would have been obvious to one of ordinary skill in the art of electronic controls for agricultural vehicle having traveling power take-offs to adjust the speed of the take-off with respect to motor speed and vehicle traveling speed.

Dependent claims 11-13 are essentially similar to claims 7-9, as discussed above.

With respect to new claims 15-20 additionally reciting specific RPM values for each of the low stage, intermediate stage, and a high stage, please again see the rejection above.

Response to Arguments

4. Applicant's amendments and arguments filed 10/4/10 have been fully considered but they are not persuasive, in that while the Examiner acknowledges that Hrazdera does indeed disclose a variable ratio transmission in the form of a CVT, it is the further the Examiner's position that it would have been obvious to one of ordinary skill in the art to either control the CVT of Hrazdera in a stepped manner so as to exhibit low, intermediate and a high stage with respective shaft speed values, or alternatively to actually substitute a stepped type of transmission (having three stages), since Hrazdera already teaches that a conventional transmission may be used instead.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWARD PIPALA whose telephone number is (571)272-1360. The examiner can normally be reached on M-F 9:30 - 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward Pipala/
Examiner, Art Unit 3663